Listing of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Currently amended): A method of detecting the presence or absence of a pathogenic microorganism of interest in a sample by detecting the modification of a substrate exposed to said sample, wherein the substrate includes at least one member of the group consisting of the peptide sequence LLGDFFRKSKEKIGKEFKRIVXRIKOFLRNLVPRTES (SEQ ID NO: 1), the peptide sequence KKASEAAHKSALKSAE (SEQ ID NO: 3), the peptide sequence CHHHASEAAHKSALKSAE (SEQ ID NO: 4), the peptide sequence KHLGGGALGGGAKE (SEQ ID NO: 5), the peptide sequence KHLGGGGGAKE(SEQ ID NO: 6), the peptide sequence ACCDEYLQTKE (SEQ ID NO: 7), the peptide sequence ADTVEPTGAKE (SEQ ID NO: 8), the peptide sequence KLPHKLSWSADNP (SEQ ID NO: 9), the peptide sequence PVPSTPPTPSPSTP (SEQ ID NO: 10), the peptide sequence NMLSEVERE (SEQ ID NO: 11), thepeptide sequence KQNMLSEVERADTE (SEQ ID NO: 12), the peptide sequence NEAIQEDQVQYE (SEQ ID NO: 13), the peptide sequence ETKVEENEAIQK(SEQ ID NO: 14), the peptide sequence OSRPVRRRRRPRVSK (SEQ ID NO:.15), the peptide sequence KVSRRRRRGGD (SEQ ID NO: 16), the peptide sequence KKASEVSRRRRRGGK (SEQ ID NO: 17). the peptide sequence CHHHASEVSRRRRRGGK (SEQ ID NO: 18), the peptide sequence KEKIGKEFKRIVQE (SEQ ID NO: 19), the peptide sequence KVQRIKOFLRNLVE(SEQ ID NO: 20), the peptide sequence EAAGAMFLEAIPK (SEQ ID NO: 21),the peptide sequence EGAMFLEAIPMSIPK (SEQ ID NO: 22), the peptide sequence CGAMFLEAIPMSIPAAAHHHHH (SEQ ID NO: 23), the peptide sequence KARRRRRGGGAMFLEAIPMSIPCGC (SEQ ID NO: 24), the peptide sequence VSRRRRRGGDGDGC (SEQ ID NO: 25), the peptide sequence GGDGDGC (SEQ ID NO: 26), the peptide sequence VSRRRRRGGDGKGDAC (SEQ ID NO: 27), the peptide sequence NEAIQEDQVQARRAKARRAC (SEQ IDNO: 28), the peptide sequence QVQARRAKARRAC (SEQ ID NO: 29), the peptide sequence GGDGKGDAC (SEQ ID NO: 30), the peptide sequence QVQARRRAKARRRAC (SEQ ID NO: 31), the peptide sequence VSRRRRRGGKGC (SEQ ID NO: 32), the peptide sequence SVTRRRRRGGRASGGC (SEQ ID NO: 33), the peptide sequence SEAIQEDQVQYCAAAHHHHH (SEQ ID NO: 34), the peptide sequence

KARRRRRGGDGDGCGC (SEQ ID NO:35), the peptide sequence HHHHHSRRRRRGGCGC (SEQ ID NO: 36), the peptide sequence HHHHHSVQRIKDFLRNLVCGC (SEQ ID NO: 37), the peptide sequence RRRRRSVQRIKDFLRNLVCGC (SEQ ID NO: 38), the peptide sequence HHHHHAAHKSALKSACGC (SEQ ID NO: 39), the peptide sequence RRRRRAAHKSALKSACGC (SEQ ID NO: 40), the peptide sequence PGTKL YTVPW (SEQ ID NO: 41), an Alt derived peptide, a peptidoglycans, lipoteichoic acid, and a lipid vesicle, said method comprising the steps of:

a) exposing an unmodified substrate to a sample under conditions that will result in a modification of the substrate by a protein produced by any of said pathogenic microorganism of interest which may be present in said sample, the unmodified substrate including a peptide and a first colorimetric component, the first colorimetric component being coupled to the peptide; and

b) detecting a modification of the substrate or an absence of the modification of the substrate, wherein the modification comprises cleaving a portion of the peptide comprising the first colorimetric component from the substrate and results in a visible color change which is perceptible without any kind of detection equipment or enhancement equipment; wherein the peptide component of the substrate has an amino acid sequence which permits said substrate to specifically and uniquely react with said protein produced by said pathogenic microorganism of interest; and

wherein said first colorimetric component comprises a reactive dye approved for use in foods, drugs, cosmetics or medical devices by the U.S. Food & Drug Administration,

thereby detecting the presence or absence of a pathogenic microorganism of interest.

Claim 2 (Original): A method according to claim 1, wherein the first colorimetric component is covalently bonded to the peptide.

Claim 3 (Previously Presented): A method according to claim 1, wherein the modification includes hydrolysis of a peptide bond and results in a portion of the peptide detaching from the substrate.

Claim 4 (Canceled)

Claim 5 (Previously Presented): A method according to claim 1, wherein the first colorimetric component is one of the members of the group consisting of a dye; a reactive dye; a fiber reactive dye; a dye suitable for use in a contact lens; a dye suitable for use in a suture; a monohalogentriazine dye; a dihalogentriazine dye;a 2,4,5 trihalogenopyriminidine dye; a 2,3 dihaloquinoxaline dye; a N-hydroxysulfosuccinimidyl a (sulfo-NHS) ester functionalized dye; a N-hydroxysuccinimidyl(NHS) functionalized dye; a vinyl sulfone dye; a sulfonylchloride dye; a tetrafluorophenyl ester functionalized dye; an isothiocyanate functionalized dye; and an iodoacetyl functionalized dyes.

Claim 6 (Previously Presented): A method according to claim 1, wherein the visible color change is a loss of color.

Claim 7 (Previously Presented): A method according to claim 1, wherein the unmodified substrate further includes a second colorimetric component that is dissimilar to the first colorimetric component.

Claim 8 (Previously Presented): A method according to claim 1, wherein the peptide is coupled to a solid support.

Claim 9 (Original): A method according to claim 8, wherein the modification of the substrate results in a hue of the solid support becoming more visible.

Claim 10 (Previously Presented): A method according to claim 8, wherein the peptide is covalently attached to the solid support.

Claim 11 (Previously Presented): A method according to claim 8, wherein the solid support is selected from the group consisting of a wound dressing, a sterilized material, an article that contains the sample, an article that collects the sample, a polymer, a membrane, a resin, glass, a sponge, a disk, a scope, a filter, a lens, a foam, a cloth, a paper, a suture, and a bag.

Claim 12 (Previously Presented): A method according to claim 1, wherein the sample is at least one of the group consisting of a wound surface on a subject, a body fluid, a piece of hair, a piece of nail, a piece of shell, a piece of scale, apiece of feather, a piece of tissue, an article implanted in the body of an animal, catheter, a urine collection bag, a blood collection bag, a plasma collection bag, a disk, a scope, a filter, a lens, foam, cloth, paper, a suture, a swab, a dipstick, a sponge, a polymeric article, an article made of a resin, a glass article, a test tube, a well of a microplate, a portion of contact lens solution, a sponge, a polymeric material, a membrane" an article made of resin, an article made of glass, and a swab.

Claim 13 (Previously Presented): A method according to claim '1, wherein modification of the substrate results in the migration of the cleaved portion of the peptide toward a collector, the migration resulting in a visible color change.

Claim 14 (Original): A method according to claim 13, wherein the collector includes at least one material selected from the group consisting of a membrane, a resin, a polymer, a film, glass, or a chelating material.

Claim 15 (Previously Presented): A method according to claim 1, wherein modification of the substrate is used to indicate the presence of a bacterial enzyme selected from the group consisting of a lysin, an autolysin, a lipase, an exotoxin, a cell wall enzyme, a matrix binding enzyme, a protease, a hydrolase, a virulence factor enzyme, and a metabolic enzyme.

Claims 16 to 26 (Canceled)